

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (currently amended) A fuel cell system having a cooling fluid flowing therethrough, comprising:

a fuel cell stack ~~in heat transfer communication with said cooling fluid including a plurality of proton exchange membranes each having an anode side and a cathode side and a plurality of coolant passages extending between adjacent ones of said plurality of proton exchange membranes;~~ and

a conduit in communication with said coolant passages and through which said cooling fluid flows and comprising a first layer of hydrogen-permeable material, wherein hydrogen within said cooling fluid permeates through said first layer of hydrogen-permeable material to reduce a hydrogen content of said cooling fluid.

2. (original) The fuel cell system of claim 1 further comprising a support layer disposed concentric to said first layer of hydrogen-permeable material.

3. (original) The fuel cell system of claim 2 wherein said support layer is breathable to enable passage of said hydrogen to atmosphere.

4. (original) The fuel cell system of claim 2 wherein said support layer includes a mesh through which said hydrogen permeates.

5. (original) The fuel cell system of claim 1 further comprising a second layer of hydrogen-permeable material disposed about said first layer of hydrogen-permeable material.

6. (original) The fuel cell system of claim 5 further comprising a support layer disposed between said first and second layers of hydrogen permeable material.

7. (original) The fuel cell system of claim 1 further comprising a fluid-permeable protective layer disposed about said conduit, protecting said conduit from impact with debris.

8. (original) The fuel cell system of claim 1 further comprising a hydrogen-permeable layer having a partial catalyst coating to induce a reaction between said hydrogen and oxygen to produce water.

9-32. (cancelled)